DETAILED ACTION

Election/Restrictions

Applicant's election of Group I corresponding to claims 1-41, 57-59, 66-68, 72-75, 79-80 in the reply filed on 02/07/2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

1. Claims 57-58, 66-68, 72 are rejected under 35 U.S.C. 101 because claimed invention is directed to non-statutory subject matter as follows. Claims 57-59, 66-68, 72-75, 79-80 defines a computer program embodying functional descriptive material. However, the claim does not define a computer-readable medium or memory and is thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized" – Guidelines Annex IV). That is, the scope of the presently claimed a computer program can range from paper on which the program is written, to a program simply contemplated and memorized by a

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person. The examiner suggests amending the claim to embody the program on "computer-readable medium" or equivalent in order to make the claim statutory. Any amendment to the claim should be commensurate with its corresponding disclosure.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

- 2. Claims 1, 3-6, 8, 9, 11-13, 15-17, 22-27, 29, 31, 32, 36-38, 40, 41, 57-59, 66-68, 72-75, 79-80 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 6,330,392 by Nakatani et al.
- 3. Regarding **claim 1**, an audio and/or video generation apparatus which is arranged in operation to generate audio and/or video signals, audio and/or video generation apparatus, comprising
 - A recording means which is arranged in operation to record audio and/or video signals on a recording medium (fig. 17, col. 33 lines 14-col. 34 lines 32),

- A meta data generation processor which is arranged in operation to generate meta data identifying the content of audio/video signals in response to audio/video signals (fig. 36-39, col. 49 lines 24-col. 51 lines 41, fig. 70-77, col. 75 lines 15-col. 84 lines 61),
- A communications processor which is operable to communicate meta data separately from recording medium (fig. 41, col. 54 lines 12-col. 56 lines 26, fig. 78-95, col. 86 lines 27-67)
- 4. Regarding **claim 3**, an audio and/or generation apparatus wherein meta data generated by meta data generation processor is at least one picture which is representative of an image from recorded video signals (col. 57 lines 22-27, col. 74 lines 56-61).
- 5. Regarding **claim 4**, an audio and/or generation apparatus wherein meta data processor is arranged in operation to associate picture with an address on recording medium at which image is recorded, address forming part of meta data communicated by communications processor (fig. 36-39, col. 49 lines 24-col. 51 lines 41, fig. 70-77, col. 75 lines 15-col. 84 lines 61, fig. 41, col. 54 lines 12-col. 56 lines 26, fig. 78-95, col. 86 lines 27-67).

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6. Referring **claim 5**, an audio and/or video generation apparatus wherein meta data are the in and out points of a take of the audio/video signals (fig. 44, col. 57 lines 21-37, col. 58 lines 40-col. 60 lines 46).

- 7. Regarding **claim 6**, an audio and/or video generation apparatus wherein meta data includes a unique identification code for identifying the audio/video signals (fig. 35-39, col. 49 lines 24-col. 51 lines 41).
- 8. **Claim 8** is rejected for the same reason as discussed in the corresponding claim 6 above.
- 9. **Claim 9** is rejected for the same reason as discussed in the corresponding claim 1 above.
- 10. Claim 11 is rejected for the same reason as discussed in the corresponding claim 3 above.
- 11. Claim 12 is rejected for the same reason as discussed in the corresponding claim 4 above.
- 12. Method **claim 13** is rejected for the same reason as discussed in the corresponding apparatus claim 1 above
- 13. Claim 15 is rejected for the same reason as discussed in the corresponding claim 9 above.

- 14. Regarding **claim 16**, a video generation apparatus which is arranged in operation to generate video signals representative of an image source, video generation apparatus comprising
 - A recording processor which is arranged in operation to record video signals on a recording medium (fig. 17, col. 33 lines 14-col. 34 lines 32)
 - A meta data generation processor which is arranged in operation to receive video signals and to generate at least one sample image which is representative of a video image from recorded video signals, and to associate sample image with an address on recording medium at which video image is recorded. (col. 57 lines 22-27, col. 74 lines 56-61, col. 58 lines 48-59)
- 15. **Claim 17** is rejected for the same reason as discussed in the corresponding claim 5 above.
- 16. Claim 22 is rejected for the same reason as discussed in the corresponding claims 1 and 5 above.
- 17. Claim 23 is rejected for the same reason as discussed in the corresponding claim 3 above.
- 18. Claim 24 is rejected for the same reason as discussed in the corresponding claims 3 and 5 above.
- 19. Claim 25 is rejected for the same reason as discussed in the corresponding claim 22 above.

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20. Regarding **claim 26**, a video generation apparatus wherein recording medium is a random access memory, and address indicates a place in memory where video image is recorded (fig. 2)

- 21. Claim 27 is rejected for the same reason as discussed in the corresponding claims 1 and 5 above.
- 22. Claim 29 is rejected for the same reason as discussed in the corresponding claim 6 above.
- 23. Meta data **claims 31, 32** are rejected for the same reason as discussed in the corresponding video claims 16, 17 respectively above.
- 24. Claims 36, 40, 41 are rejected for the same reason as discussed in the corresponding claim 31 above.
- 25. Claim 37 is rejected for the same reason as discussed in the corresponding claims 1, 3, and 5 above.
- 26. Method **claim 38** is rejected for the same reason as discussed in the corresponding video generation claim 17 above.
- 27. Regarding **claim 57**, a computer program (fig. 17 (1)) providing computer executable instruction, which when loaded on to a data processor configures data processor to operate as an audio and/or video generation apparatus.

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28. Regarding **claim** 58, a computer program (fig. 17 (1)) having computer executable instructions, which when loaded on to a data processor causes the

processor to operate in accordance with the method according to claim 13.

29. Claim 59 is rejected for the same reason as discussed in the corresponding

claim 57 above.

30. Claims 66-68, 72-75, 79-80 are rejected for the same reason as discussed in the

corresponding claim 57 above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

31. Claims 2, 10, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over

US Patent No. 6,330,392 by Nakatani et al. in view of US Patent No. 4,963,994 by

Levine.

32. Regarding claim 2, Nakatani discloses metadata (fig. 36-39) but Nakatani fails to

disclose meta data generation processor to receive a pre-defined list of takes of

audio/video signals to be generated, meta data generation processor being arranged in

operation to generate meta data in association with list of takes, and communications

processor is arranged to communicate meta data in association with list of takes.

Levine discloses a pre-defined list of takes o audio/video signals to be generated (Col. 1 line 54-63, Col. 2 line 12-24).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have pre- defined list of takes for future programming which will be convenient for viewer.

33. Regarding **claim 10**, Nakatani discloses stored metadata (fig. 36-39) but Nakatani fails to disclose meta data generation processor to receive a pre-defined list of takes of audio/video signals to be generated, meta data generation processor being arranged in operation to generate meta data in association with list of takes, and communications processor is arranged to communicate meta data in association with list of takes.

Levine discloses a pre-defined list of takes o audio/video signals to be generated (Col. 1 line 54-63, Col. 2 line 12-24).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have pre-defined list of takes for future programming which will be convenient for viewer.

34. Claim 14 is rejected for the same reason as discussed in the corresponding claim 10 above.

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35. Claims 7, 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,330,392 by Nakatani et al. in view of US Patent No. 5,052,040 by Preston et al.

36. Regarding **claim 7**, Nakatani discloses unique identification code but fails to disclose unique identification code includes a UMID.

Preston discloses unique identification code includes a UMID (Fig. 4, Col. 5 lines 6-16).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have UMID for metadata. UMID will be convenient for the user to use while watching recorded program.

- 37. Claim 30 is rejected for the same reason as discussed in the corresponding claim 7 above.
- 38. Claims 18-21, 33-35, 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,330,392 by Nakatani et al. in view of US Patent No. 6,766,098 by McGee et al.
- 39. Regarding **claim 18**, Nakatani discloses metadata generation processor is arranged in operation to generate a plurality sample images, each of which is representative of a video image from recorded video signals (col. 57 lines 22-27, col. 74 lines 56-61) but Nakatani fails to disclose activity detector.

McGee discloses activity detector to detect scene change (Col. 5 line 25-33, 50-

60)

Therefore, it would have been obvious to one having ordinary skill in the art at

the time the invention was made to have activity detector for arranging operation of

receiving information to let viewer know what changes made.

40. Regarding claim 19, McGee discloses a video generation apparatus wherein

activity detector generates activity signal by forming a histogram of color components of

video image and determining a rate of change of color components (Col. 5 line 25-33,

50-60)

41. Regarding claim 20, McGee discloses a video generation apparatus wherein

activity detector generates activity signal by from motion vectors of image components

of video image signal (Col. 6 lines 56-Col.7 lines 16).

42. Regarding claim 21, Nakatani discloses a video generation apparatus a display

processor which is arranged in operation to provide a visible representation of sample

images (col. 57 lines 22-27, col. 74 lines 56-61).

43. Metadata claims 33, 34 are rejected for the same reason as discussed in the

corresponding video claims 18, 19 respectively above.

44. Claim 35 is rejected for the same reason as discussed in the corresponding claim 20 above.

- 45. Claim 39 is rejected for the same reason as discussed in the corresponding claims 18 above.
- 46. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,330,392 by Nakatani et al.
- 47. Regarding **claim 28**, Nakatani discloses metadata processor generates sample images but fails to discloses sample images compression encoding process such as the JPEG compression encoding process.

It is noted that the use of JPEG is old and well-known in the recording art. Therefore, official notice is taken. Moreover, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a well-known JPEG compression for making more space in the recording medium.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NIGAR CHOWDHURY whose telephone number is (571)272-8890. The examiner can normally be reached on 9 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NC 04/19/2008

/Thai Tran/ Supervisory Patent Examiner, Art Unit 2621